

Abstract of the Disclosure

The invention concerns a phase contrast X-ray device for creating a phase contrast image of at least one object with at least one X-ray source for generating an X-radiation that has a specific spatial coherence within a specific optical distance to the X-ray source and at least one evaluation unit for converting the X-radiation after the X-radiation has passed through the object arranged within the optical distance to the X-ray source in the phase contrast image of the object. The X-ray source has an output ranging from 50 W up to and including 10 kW and a spatial coherence length of the X-radiation has been selected within the optical distance to the X-ray source ranging from 0,05 μm .